DOCUMENT RESUME

ED 471 302 TM 034 671

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TITLE	Self-Direction in Organizations: An Instrument for the Assessment of Learner and Employee Initiative.
PUB DATE	2002-11-00
NOTE	23p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Chattanooga, TN, November 6-8, 2002).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Attitudes; *Behavior Patterns; *Employees; Problem Solving; Reliability; Test Construction; Validity
IDENTIFIERS	*Self Regulated Learning

ABSTRACT

A new scale for self-directed learning oriented toward learners in academic settings and in other environments such as the workplace was developed. Participants were employees of a southeastern state. To obtain reliability estimates, items were developed that asked questions about the employee's behavior in the work environment. Validity was established through separate scales concurrently developed to measure behavior toward volunteering and continuing education. The developed test was designed to demonstrate the degree to which learners and employees exhibit behavior consistent with being a "self-starter," or what scholars would call "self-directed behavior." Approximately 82% of the participants tended to exhibit this behavior. Initiative, or what really should be called self-direction, is nothing more than taking personal responsibility for one's success, and it is likely to impact the problem solving behavior of learners and employees favorably. (Contains 7 figures and 19 references.) (Author/SLD)

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Running Head: SELF-DIRECTION

Self-Direction in Organizations: An Instrument for the Assessment of Learner and Employee Initiative

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Presented at the 2002 Annual Meeting of the
Mid-South Educational Research Association

Chattanooga, Tennessee

November 6-8, 2002

TM034671

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Abstract

Research has shown that as much as 90% (Matthews & Candy, 1999) of learning is incidental and that self-directed activities play a key role in the process. In addition, personal computers and now the Internet have increased the demands placed upon our society for learning (Guglielmino, Alligood, & Nowocien, 1999). The purpose of this research was to develop a new scale for self-directed learning (SDL) that would be oriented primarily to learners in not only academic settings but also other environments such as the workplace.

The participants in this study were all employees of a southeastern state. In order to obtain reliability, items were developed that asked questions about the employee's behavior in their work environment. Validity was established through separate scales concurrently developed to measure behavior toward volunteering and continuing education.

This study developed a test that would demonstrate the degree to which learners and employees exhibit behavior consistent with being a "self-starter," or what scholars would call "self-directed behavior." Regarding results, approximately 82% of the participants tended to exhibit this behavior. Note that initiative is likely to favorably impact learners and employees' problem solving ability, attitude toward personal change, creativity, and outlook on continuous improvement. Initiative, or what should really be called self-direction is nothing more than taking personal responsibility for one's learning process.

Self-Direction in Organizations:

An Instrument for the Assessment of Learner and Employee Initiative

We have all heard the phrase "information age" at one time or another. Certainly, with the advent of data processing equipment, especially the personal computer, and now the Internet, this phrase is more important than ever as our society keeps up with the demands placed on our lives for learning (Guglielmino, Alligood, & Nowocien, 1999). The supposition of these three authors is that the information explosion has created "similar needs for change in the professional development for teachers" (p. 17). This "coming of the knowledge era has created opportunities and demands for learning to move" (Matthews & Candy, 1999, p. 47) to the forefront if industry is to remain competitive in this time of globalization and technological innovation. Matthews and Candy go on to describe a new theory, compatible with the demands of the knowledge era. This is the theory of "knowledge work" (p. 48), which emphasizes that an employers' "wealth exists principally in the heads of its employees" (p. 48). Their research has shown that as much as 90% (p. 49) of an organization's learning is incidental and that self-directed activities play a key role in the process. Guglielmino and Nowocien (1998), in their research suggest that a new paradigm in educational reform is the "preparation for lifelong learning" (p. 91). As a part of this supposition they go on to suggest that only two percent of today's high school students learn what they need for application in the job market (Barth as cited in Guglielmino & Nowocien, 1998). Guglielmino and Nowocien suggest that reform is needed for entry into the 21st century and posit to become a lifelong learner the process must be self-directed. Their hypothesis is that "teachers' and

administrators' preservice and inservice development is a reflection of the past rather than a projection of the future" (p. 94). Therefore, the purpose of this paper is to present an overview of the development for a new scale to assess self-directed learning (SDL) that would be oriented toward the learner and employee.

Historical Perspectives on SDL

According to Knowles (as cited in Kolb, 1984), the training and development field began to move toward a philosophy based heavily on experience and SDL during the post World War II period. According to Kolb (1984), the "organizing principle for education" (p. 18) is self-direction, at least as grounded in themes originating from the literature of Lewin, Dewey, and Piaget. Development in each of the four dimensions of Kolb's experiential learning theory is characterized from growth in which "each dimension proceeds from a state of ... self-direction" (p. 140). Kolb goes on to postulate even though "many educational innovations have been developed in the name of ... self-direction" (p. 197), they fail to recognize and provide for the characteristics of each individual's learning style. His hypothesis is that we need alternative leaning methodology. Later he suggests that students who do well in a "concrete experience ... [have] their ability to learn ... enhanced by ... [being] self-directed" (p. 200). DeCharms (as cited in Kolb, 1999, p. 220) points out that when individuals can take a proactive rather than reactive role in shaping their life activities, their integrative development is stronger.

Additionally, Craik (as cited in Candy, 1991) suggests that in order to reap the benefits of education, students need to "be their own instructors as to the greater portion of what they acquire" (p. 5). Candy suggests there is a preponderance of educators who believe that self-direction is the "route to realize and attain the innermost personhood of

the learner" (p. 6). He goes on to suggest that self-direction is a process that sets aside learning from formal instruction through placing it in the context of natural or everyday settings. His theory is that self-direction is not a quality that people either have or do not have, but that it is present in all to varied degrees. His supposition is that SDL is one goal of adult education. Candy's hypothesis says the self-directed learner exhibits "moral, emotional, and intellectual autonomy … [and that their development should be the] goal … of educational endeavors" (p. 19). Suggested is that the goal for adult educators is to help others "reach their full potential, maximize their opportunities, and to accomplish their individuals goals" (Candy, p. 22).

In one of the seminal writings on SDL, Knowles (1975) hypothesizes that SDL "is the best way to learn" (p. 10). His explanation of why SDL is so significant is stated as follows:

> We are not talking about something that would be nice or desirable; neither are we talking about some new educational fad. We are talking about a basic human competence – the ability to learn on one's own – that has suddenly become a prerequisite for living in this new world. (pp. 16-17)

In a working definition of SDL Knowles "describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating leaning outcomes" (p. 18). Some, such as Matthews and Candy (1999) view learning as an individual activity. Others such as Knowles stress that a frequent shortfall, of proponents of self-direction, is to imply SDL is learning only on an individual basis. In this case, he

posits learning usually takes place "with various kinds of helpers .... [and] there is a lot of mutuality among a group of self-directed learners" (p. 18). In another foundational piece, Tough (1979) proposes that a person's efforts to learn are grounded in a notion that the learner's desire "to learn or change is stronger than all ... other motivation" (p. 2) and that the learner must do "most of the day-to-day planning" (p. 2) for these learning efforts.

Lastly, Brockett and Hiemstra (1991) stress that SDL "is not a fad; rather it is a way of life for most adults" (p. 1). Their belief is that SDL is "a combination of forces both within and outside the individual that stress the learner accepting ever-increasing responsibility for decisions associated with the learning process" (p. 9). Torrance and Mourad (as cited in Brockett & Hiemstra) in their research revealed, "self-directed readiness appears to be linked to ... [one's] creativity, problem-solving ability, and degree of personal change" (p. 63).

Status of Research

According to Matthews and Candy (1999) the worker of today is actively seeking out learning opportunities. The authors call this "anticipatory" (p. 50) so as to not confuse it with "reactive" learning (p. 50). This visionary or anticipatory learning as it is called by the authors leads to the suggestion of continuous improvement, a term mentioned often in the literature. Watkins and Marsick (1993) have created their model of "continuous work and learning" (p. 26) on the basis that "professionals possess certain characteristics of self-directed learners" (p. 28).

In recent literature on the workplace Bierema (2000), in her chapter on HRD issues in the new *Adult Education Handbook*, suggests that the individual's needs are critical to minimizing tension in the workplace. In this case, she suggests that if the individual's

needs do not match the organization's needs, an element of organizational control results. Furthermore, Fenwick (2000) goes on to stress this need for the organization to stay out of the individual's development as a result of translating the organization's needs into some training fad that is driven down to the individual's level. Her hypothesis here is that critical reflection is for workers, not the organization. This unfolds in an understanding of the self, according to Fenwick. Furthermore, she posits the "questions of self underlie women's development through their work experiences" (p. 299).

In some of the more recent research on the workplace, Cseh, Watkins, and Marsick (2000) emphasize the importance of informal and incidental learning in the workplace. Their supposition is that the time lapse between knowledge acquisition and obsolescence is always diminishing in size and therefore we need to find and understand new ways of learning besides formal training. They recognize that SDL is one of the techniques best suited to informal and incidental learning in a work situation.

The most recent writings on SDL include an emphasis on the paradox of individual versus social learning (Brown, 2000). In this instance, Brown points out the control issues through the management of some organizations wherein SDL is promoted at work but in reality the outcomes are controlled and channeled. This concept, as posited by Brown, is "influenced by individual action or agency and constrained by structural or contextual features" (p. 23). I would put this in the context of a socio-political interest. It is interesting to note that Brown concludes, "what is learned will be largely up to the individual" (p. 23). I have often suggested that you cannot hold a gun to someone's head and force them to do, or in this case learn something.

In more dated literature, Guglielmino and Guglielmino (1994) do an excellent job tying SDL to the workplace. In their research, the increasing rate of technological change is utilized as justification for renewing interest in SDL in business and industry. Durr (as cited in Guglielmino and Guglielmino) mentioned that in his organization of Motorola, SDL coincides with their philosophy of the learning organization. In a subsequent testimonial, Tooker (as cited in Guglielmino and Guglielmino), the President of Motorola mentioned the continued success of the organization depends upon the ability to recruit and retain employees who are capable of continuous learning as the organization changes. He also went on to say that traditional training in a classroom environment is no longer a viable alternative for the accomplishment of that goal. With the receipt of the highly coveted Malcolm Baldridge Award, Motorola considers itself to be "the learning company" (p. 40). Furthermore Motorola attributes some of its success to SDL while suggesting that the organization can no longer train employees to do a finite number of job tasks. The company proposes that it is the employee's responsibility to change and grow, assess needs for learning, determine how to acquire those skills, and move on to the next challenge. Motorola's assessment is that in some cases, the rate of change is so great while the number to be trained is so small, that it just does not make sense to pursue training in classroom environments.

In their research, Guglielmino, Guglielmino, and Long (as cited in Brockett and Hiemstra, 1991) hypothesize that a high degree of SDL readiness be an attribute solicited in individuals recruited to fill highly creative, rapidly changing, or those requiring high problem solving abilities jobs in business and industry. Brockett and Hiemstra suggest in

their research that a number of corporate training scenarios are utilizing SDL as a foundation for their training programs.

Construct of Initiative

Much of the past research has been oriented to academic circles and higher reading levels (Guglielmino, 1977; Oddi, 1985). It is the supposition that this instrument be used to measure SDL at lower reading levels. Some researchers would argue that the instrument could be constructed with the following items: proactive roles (DeCharms as cited in Kolb, 1999); being own teachers (Craik as cited in Candy, 1991); moral, emotional, & intellectual autonomy (Candy, 1991; and initiative (Knowles, 1975). The scale development in this instrument is oriented toward everyday settings (Candy, 1991) in industry, leisure, and family responsibilities.

It is also of significance that other aspects, such as the worker's ability to plan their needs, prepare goals, decide on resources, implement learning strategies, and evaluate outcomes, are tantamount to the successful completion of the process (Knowles, 1975). Items measured in the most widely accepted scale today are: openness to learning opportunities, self-concept as an effective leaner, initiative and independence, acceptance of responsibility for one's own learning, creativity, future orientation, ability to use basis problem solving skills (Guglielmino, 1977). A Likert (as cited in Guglielmino, 1977) type scale was used for this research. It is speculated that at least 18 scales have been developed to assess self-directedness (S. Stockdale, personal communication, October 18, 2002).

As initiative was treated on an equal weighting previously, I posit that this new instrument be grounded in initiative and weight the trait of initiative over other factors. Characteristics determined by this instrument could be classified as desirable, necessary, or essential (Guglielmino, 1977) to the employer.

Method

In order to establish reliability of the instrument, a version was specifically designed to fit the participant population tested. To field test the instrument, a pilot study was devised with a sample of convenience, of sufficient size to demonstrate reliability. Even though the desire was for a group of working adults to be tested, the educational level of the population was higher than initially targeted.

Participants

The participants in this study were all employees of a southeastern state. In this case, a population was required that consisted of employees in a work force of some type. Each of the subjects had graduate degrees. No demographic data were collected on the participants. Due to the more manageable aspects of capturing a large number of participants in a single setting, an opportunity arose to survey 443 attendees at a continuing education conference, held in October 2001.

Materials

In order to accommodate an unknown number of participants, 550 surveys were printed. The instrument utilized in the survey was wholly developed for this research effort. Only one instrument was utilized.

Design and Procedure

The instrument was developed from the supposition that initiative played the single most important role in SDL (Knowles, 1975). In order to obtain reliability, a minimum of eight items were developed that asked questions about the employee's behavior in the workplace. These items were centered on the behaviors associated with being self motivated, being pro-active, being resourceful, looking forward to the day, and planning activities (Candy, 1991; Brockett & Hiemstra, 1991).

To achieve validity separate scales were concurrently developed to assess behavior toward volunteering and continuing education. Both of these constructs are supported by the literature. To achieve a sufficient reliability in each of the three scales, 35 total items were utilized. Of the 35 total items, eight were reverse scored to keep the participants' responses honest. For initiative, 17 items were developed. Volunteering and continuing education each entailed nine items. A five point Likert scale was utilized for scoring with a number 1 representing strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, while 5 was utilized for strongly agreeing. Two sample items from the instrument are included Figure A.

All data were analyzed utilizing the Statistical Package for Social Sciences (SPSS) version 10.1 software. The platform utilized to run the application was a Windows 98 personal computer. Syntax was written to score the instruments and to generate reports for the reliability demonstration of each of the three scales. Other statistical properties were obtained through using the preprogrammed macros available in the menus of SPSS.

Reliability was established using Cronbach's Alpha (Nunnally & Bernstein, 1994). for each of the three scales. To achieve a final estimate of the reliability, items were

discarded if corrected item total correlations were below approximately 0.35. Validity was established using interscale comparisons of the Pearson product moment correlation. This process is best categorized as discriminate validity (Lounsbury, 2001a).

Discussion

Of the 443 instruments distributed to conference attendees, 264 were returned blank while 126 were executed. This left 160 instruments unaccounted for. Of the 126 returned, some were not completely filled out, leaving an $N = 119$ for the study. This participation level is equivalent to a 28.4% response rate.

The data were reduced in multiple runs utilizing the SPSS program. First the reliability was investigated for all 119 participants and all 35 items. From this first run, several more were made to disregard items containing low corrected item total correlations. Three items were combined into initiative while six items were discarded from the final instrument. The resulting Cronbach's alphas were as follows: $\alpha = 0.84$ for self-direction; $\alpha = 0.82$ for continuing education; and $\alpha = 0.75$ for volunteering from an initial $\alpha = 0.75$, 0.81, and 0.75 respectively.

The results of the discriminate validity check are $r = 0.49$ (self-direction to continuing education), 0.47 (self-direction to volunteering), and 0.51 (continuing education to volunteering). All three Pearson product moment correlations are significant to the 0.01 level. Research (Lounsbury, 2001b) would indicate this threshold of 0.4 would be indicative of reasonable range whereby double loading of scales is not overly risky and there is at least a 70% odds of a correct predication from the demonstrated level of correlation.

Frequencies are summarized in Figure B for the self-direction scale, Figure C for the continuing education scale, and Figure D for the volunteering scale, respectively. The data also shows the norming information for this population.

The descriptive statistics terms are summarized in Figure E. Scatter plots are shown in Figure F. With some exception for outliers, the scatter plots exhibits an oval shape characteristic of a reasonable correlation for the data.

Conclusions

The research on this scale for self-direction in the workplace was successful in this pilot study. The $\alpha = 0.84$ for self-direction demonstrates that the scale is reliable and that the items are written sufficiently well for this phase. Of course what did not go as well as hoped, was the response rate of 28%. The recommendations for future research include modifying the instrument items slightly, to improve upon the wording. The next steps should include giving the instrument to a population in another environment, possibly adult basic education (ABE) students. Some additional correlations need to be made to perhaps the number of times an employee accesses some type of on-line training, for instance. At the completion of this stage, the instrument could be offered as a diagnostic tool for the predication of an employee's behavior being characteristic of a self-starter.

References

Bierema, L. L. (2000). Moving beyond performance paradigms in human resource development. In A. L. Wilson & E. R. Hayes (Eds.), *Handbook of adult and continuing education* (New ed., pp. 278-293). San Francisco: Jossey-Bass.

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice.* New York: Routledge.

Brown, A. J. (2000). Social influences on individual commitment to self-directed learning at work. In G. A. Straka (Ed.), *Conceptions of self-directed learning: Theoretical and conceptual considerations* (pp. 23-36). New York: Waxmann Verlag.

Candy, P. C. (1991). *Self-direction for lifelong leaning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass.

Cseh, M., Watkins, K. E., & Marsick, V. J. (2000). Informal and incidental learning in the workplace. In G. A. Straka (Ed.), *Conceptions of self-directed learning: Theoretical and conceptual considerations* (pp. 59-74). New York: Waxmann Verlag.

Fenwick, T. J. (2000). Putting meaning into workplace learning. In A. L. Wilson & E. R. Hayes (Eds.), *Handbook of adult and continuing education* (New ed., pp. 294-311). San Francisco: Jossey-Bass.

Guglielmino, L. M. (1977). *Development of the self-directed leaning readiness scale*. Unpublished Doctoral Dissertation, University of Georgia.

Guglielmino, L. M., Alligood, C., & Nowocien, D. (1999). Restructuring a professional orientation program for teachers to promote continuous, self-directed learning. In H. B. Long and Associates (Eds.), *Contemporary ideas and practices in self-directed learning* (pp. 17-29). Norman, OK: Public Managers Center, College of Education, University of Oklahoma.

Guglielmino, L. M., & Guglielmino, P. J. (1994, Winter). Practical experience with self-directed learning in business and industry human resources development. In R. G. Brockett & A. B. Knox (Series Eds.) & R. Hiemstra & R. G. Brockett (Vol. Eds.) *New Directions for Adult and Continuing Education: Overcoming Resistance to Self-Direction in Adult Education, 64,* 39-46.

Guglielmino, L. M., & Nowocien, D. (1998). Self-directed learning and teachers' professional development. In H. B. Long and Associates (Eds.), *Developing paradigms for self-directed learning* (pp. 91-106). Norman, OK: Public Managers Center, College of Education, University of Oklahoma.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of leaning and development.* Englewood Cliffs, NJ: Prentice-Hall.

Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers.* New York: Association Press.

Lounsbury, J. W. (2001a). *Notes on validity.* Unpublished Manuscript, University of Tennessee.

Lounsbury, J. W. (2001b). *Thinking about accuracy and validity.* Unpublished Manuscript, University of Tennessee,

Matthews, J. H., & Candy, P. C. (1999). New dimensions in the dynamics of learning and knowledge. In. D. Boud & J. Garrick (Eds.), *Understanding learning at work* (pp. 47-64). New York: Routledge.

Nunnally, J. C., & Bernstein, I. A. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Oddi, L. F. (1985). Development and validation of an instrument to identify self-directed continuing learners. *Proceedings of the Adult Education Research Conference, 26*, 229-235.

Tough, A. (1979). *The adult leaning projects: A fresh approach to theory and practice in adult learning* (2nd ed.). Toronto: Ontario Institute for Studies in Education.

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systematic change*. San Francisco: Jossey-Bass.

Figure A. Sample items.

SDLW

DIRECTIONS: Read each sentence below. Decide whether you disagree or agree with each item using the scale shown to the right of each statement.
Make the choice which most closely fits your initial reaction to each item.
Should you feel, for whatever reason, that the item does not apply to you, or you cannot decide, mark the neutral box.
Mark your choice with an "X" or "√"

ITEM NO.	ITEM	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
3	I regard myself as a self-starter at work.					
4	I have learned a new skill, e.g. using a PC, because I thought it was important to help me do my job more effectively.					

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Figure B. Frequencies for the self-direction scale.

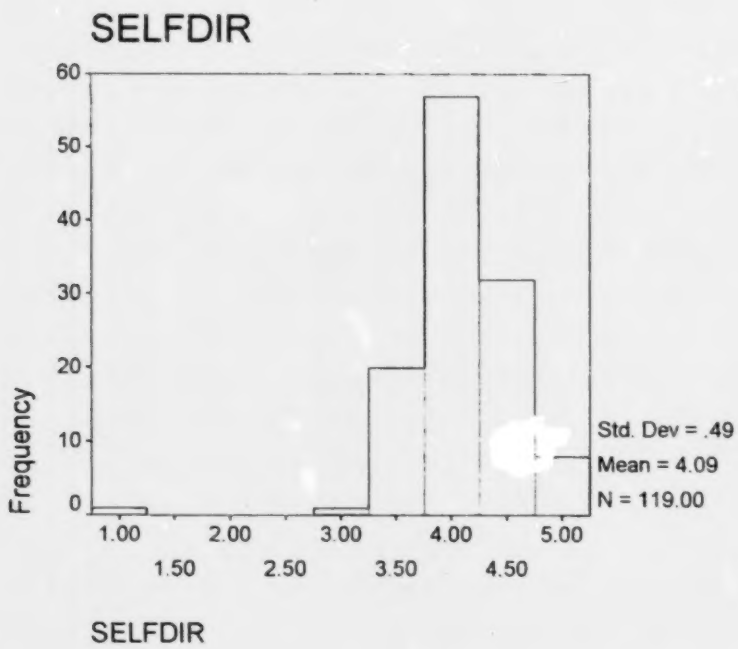


Figure C. Frequencies for the continuing education scale.

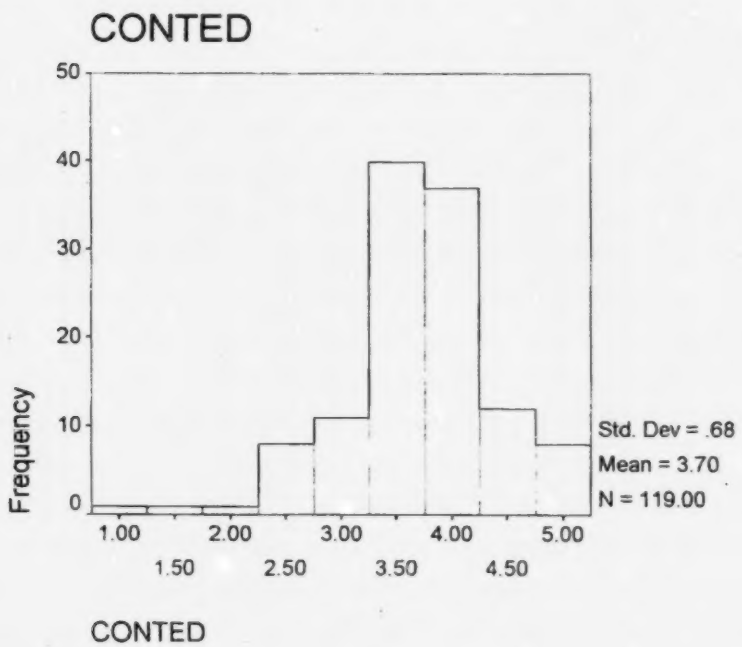


Figure D. Frequencies for the volunteering scale.

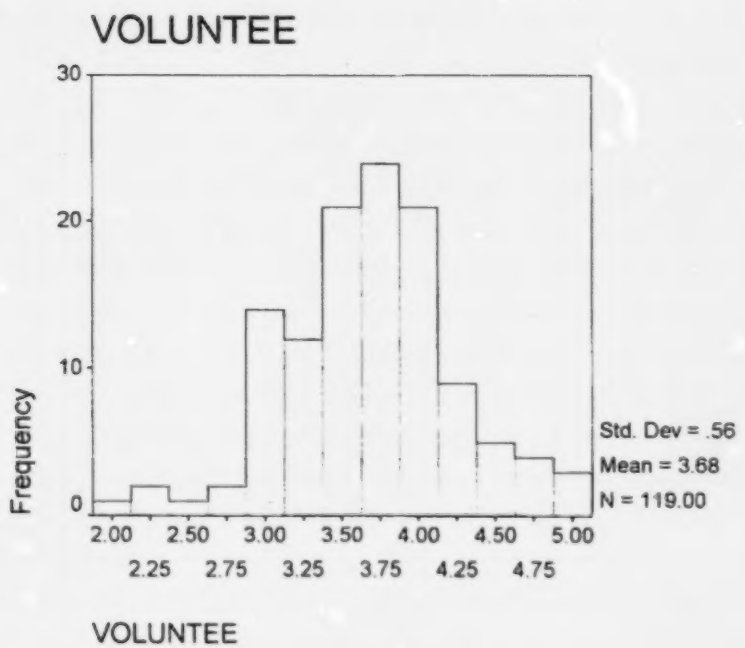


Figure E. Summary of descriptive statistics.

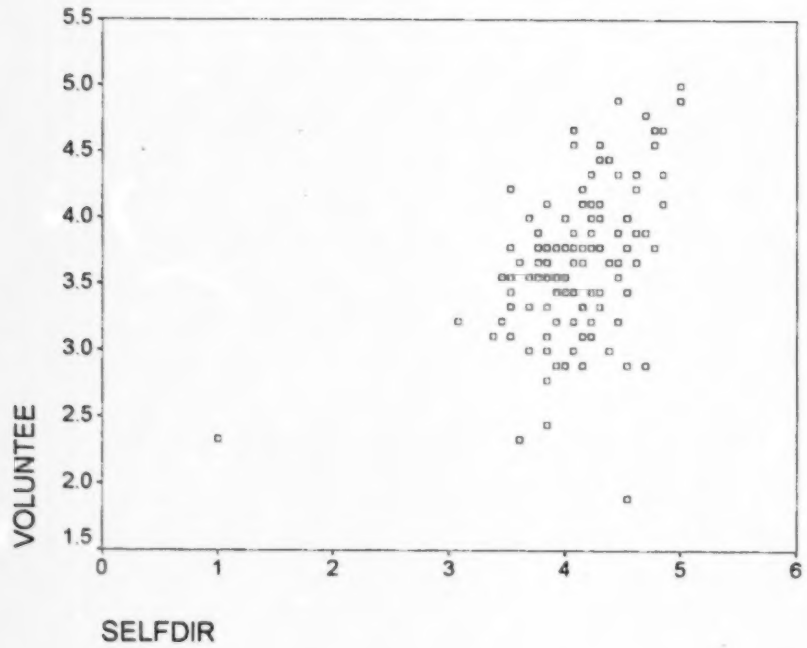
Descriptives

Descriptive Statistics

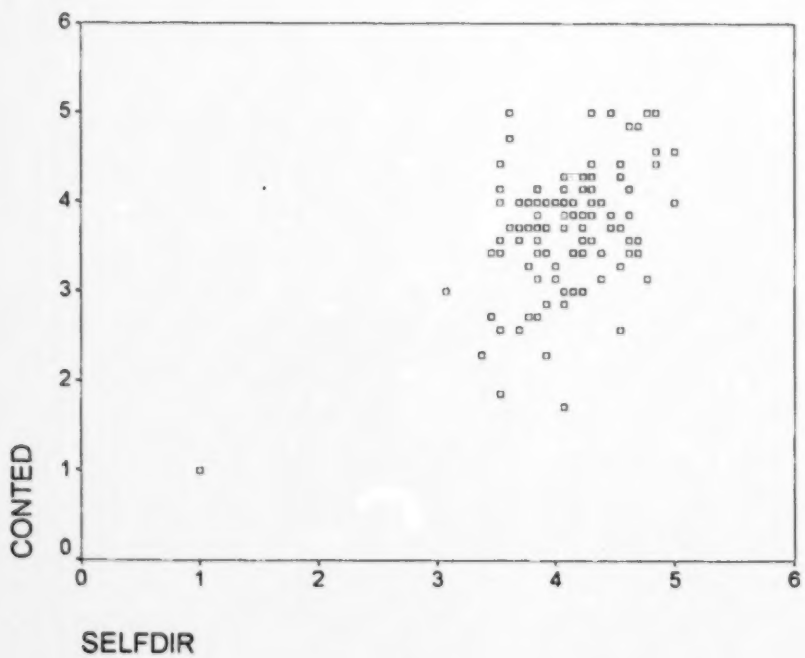
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
SELFDIR	119	1.00	5.00	4.0905	.48709	.237
CONTED	119	1.00	5.00	3.7035	.68085	.464
VOLUNTEE	119	1.89	5.00	3.6751	.56065	.314
Valid N (listwise)	119					

Figure F. Scatter plots.

Graph



Graph



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EFF-088 (Rev. 2/2001)

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